# Change in Self-Reported Pain in Patients Receiving Telehealth Counseling in Rural Texas

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## Abstract

There is ample evidence that change in pain perception occurs in conjunction with certain psychiatric disorders with many studies indicating that disorders such as depression lower pain tolerance. Mental illness may not only be a consequence of pain, but could itself cause or enhance pain. Additionally, studies have found that comorbid mental illness can be a barrier to the effectiveness of standard pain treatment protocols such as prescription medications. Less certain is whether mental health treatment can improve self-reports of physical pain.

**Purpose:** The current study investigated whether individuals reporting physical pain at their counseling intake session report improvements in their pain levels after receiving telehealth counseling services

## Method

**Participants:**

- 63 individuals from 5 rural Texas communities receiving weekly videoconference counseling services were recruited for the study
- Individuals who answered *only occasionally, sometimes, often, or most all of the time* to the item “I have been troubled by aches, pains, or other physical problems,” were included in the study. Those not endorsing pain symptoms were not included in the analyses
- **Ethnicity:** 71% Caucasian; 16% African American; 7% Hispanic; 5% Bi-racial; 2% Asian
- **Age:** 21-70; Mean = 44.9 (SD= 12.11)
- **Gender:** 69% female; 31% male

**Measures:**

Clinical Outcomes in Routine Evaluation Short Form-B (CORE-B). An 18-item self-report measure of functioning in multiple areas: well-being, problems, life functioning, and risk to self and others. An individual’s score is calculated in each of the four subsections and a total mean with scores ranging from 0-4. The gender based cut-offs scores are as follows: Risk- M=.43; F=.31, Life Functioning-M=1.29; F=1.30, Well-Being-M=1.37; F=1.77, Problems-M=1.44; F=1.62, and Total Mean-M=1.19; F=1.29.

## Analysis and Results

Paired sample t-tests were used to evaluate improvements in well-being and decreases in self-reported pain from the first counseling session to the last counseling session.

- As a whole, clients’ self-reported pain score on the CORE-B improved to a statistically significant degree between the first and last counseling sessions (*p* = .017).
- Clients also demonstrated:
  - Improvements in well-being (*p*< .001),
  - Reductions in risk for harm to self or others (*p* = 0.005)
  - Reductions in perceived problems (*p*< 0.001).

## Discussion

Individuals in rural and underserved areas of Texas benefit from counseling provided via telehealth as individuals presenting with pain at their first counseling session report improvements in their pain levels after receiving services. Additionally, having pain does not seem to interfere with improvements in other measures of mental health improvement. Previous studies of our clients have shown that physical health related quality of life scores decrease on average despite receiving counseling and experiencing subsequent improvements in mental health related quality of life scores. Taking these findings together, while physical health is not always improved as a direct result of a telehealth counseling intervention, our client’s perceptions of aches and pains improved over time.